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ABSTRACT

According to results of the 1994 National Assessment of Educational Progress (NAEP), teachers of fourth- and eighth-grade students were using a variety of assessment methods to measure their students' progress in reading. At both grades, teachers' reports indicated that in comparison with multiple-choice questions, written paragraphs were used more frequently to assess reading. Among the major findings, a significant relationship between having students provide written responses to reading and higher reading scores was observed, however the relationship was somewhat stronger at grade 4. (Contains 16 references, 2 notes, and 2 tables of data.) (RS)

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Reading Assessment in the Nation's Fourth- and Eighth-Grade Classrooms

According to results of the 1994 National Assessment of Educational Progress (NAEP), teachers of fourth- and eighth-grade students were using a variety of assessment methods to measure their students' progress in reading. At both grades, teachers' reports indicated that in comparison with multiple-choice questions, written paragraphs were used more frequently to assess reading. Among the major findings, a significant relationship between having students provide written responses to reading and higher reading scores was observed, however the relationship was somewhat stronger at grade 4.

Innovative reading assessment practices have been a major focus in numerous efforts to enhance the learning environment of young readers. Many educators and researchers agree that reading assessment should reflect instruction, that students should demonstrate their abilities within authentic contexts, and that processes as well as products of reading should be assessed (Herman, 1992; Winograd, Paris, & Bridge, 1991; Wiggins, 1993). As teachers increasingly challenge their students with a variety of literacy experiences, relying solely on traditional modes of assessment may not adequately capture the full range of students' abilities (Robinson, 1993; Sternberg, 1991).

As part of the 1994 National Assessment of Educational Progress (NAEP) in reading, the teachers of 6,692 fourth-graders and 7,651 eighth-graders were asked about their instructional and assessment techniques. Because the sample of students was representative of all fourth- and eighth-graders in the country, these results provide some indication of how America's fourth- and eighth-grade students are being assessed in reading. It is possible to relate these assessment practices to students' scores on the NAEP reading assessment. The assessment results are summarized on a scale from 0 to 500, providing a numerical index of overall student achievement in reading comprehension.

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The teachers of students in the NAEP assessment were asked to indicate how frequently they use the different reading assessment methods presented in table 1. Teachers' reports show that 83 percent of fourth-graders and 88 percent of eighth-graders were asked to provide paragraph-length written responses to demonstrate progress in reading on a weekly or monthly basis. Similarly, 83 percent of fourth- and eighth-graders were assessed with short answer tests on a weekly or monthly basis. These assessment methods that integrate reading and writing (short answer tests and paragraph-length written responses) were being used at least once a month for a significantly larger percentage of students than was the traditional assessment method of multiple-choice questions—61 percent of fourth-graders and 66 percent of eighth-graders.[1]

As an alternative to multiple-choice testing, some researchers have argued that having students construct their own responses—rather than simply selecting an answer from a list of options—allows students to demonstrate a broader range of reading abilities, including the ability to interpret, analyze, evaluate, and connect to prior knowledge (Langer, 1987; Resnick, & Resnick, 1992). Some researchers have suggested that meaningful assessments of reading should include opportunities for literate use of language—for example, responding to reading with written responses (Paris et al, 1992). The 1994 NAEP results suggest that the use of writing to assess reading progress was relatively common in fourth- and eighth-grade classrooms.

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According to the data presented in table 1, projects or presentations were used as frequently as multiple-choice tests, but not as frequently as written response assessment methods. The teachers of 64 percent of fourth-graders and 55 percent of eighth-graders reported using projects or presentations weekly or monthly. Forty percent of fourth-graders and 32 percent of eighth-graders had teachers who reported using portfolios weekly or monthly. One possible explanation for less frequent use of projects or presentations and reading portfolios may be that using these methods to assess instruction (Valencia & Pearson, 1987; Seda, 1989; Garcia & Pearson, 1992). While it is not possible to identify from these data the various combinations of assessment methods being used by teachers, the large percentage of students being assessed at least monthly with different methods suggests that many teachers may actually be using an assortment of assessment techniques rather than a single type of testing format. Furthermore, it is possible that certain assessment methods are embedded in others.

Table 1— Percentages of students assessed with various methods, grades 4 and 8, 1994 NAEP reading assessment

Assessment Methods	Grade 4				Grade 8			
	Once or Twice a Week	Once or Twice a Month	Once or Twice a Year	Never or Hardly Ever	Once or Twice a Week	Once or Twice a Month	Once or Twice a Year	Never or Hardly Ever
Teachers' Reports								
Written paragraphs	38	45	10	7	34	54	7	4
Short answer tests	29	54	7	10	30	53	9	8
Multiple-choice tests	12	49	17	22	21	45	13	21
Projects-Presentations	7	57	25	11	4	51	35	10
Reading Portfolios	14	26	15	45	12	20	16	53
Students' Reports								
Long written answers on reading tests or assignments	48	31	12	9	41	40	14	6

SOURCE: U.S. Department of Education, National Assessment of Educational Progress (NAEP), 1994 Reading Assessment

reading involves more effort and time on the part of students. For example, using projects or presentations may require students to collaborate with their peers or to engage in individual research on a particular topic. Similarly, portfolios may document the development and progress of students in literacy over an extended period of time (Farr, 1992; Valencia & Place, 1993). The use of portfolios in the classroom may involve students in reflecting on their work to promote self-evaluation as well as to increase students' sense of ownership in their literacy activities (Herbert, 1992).

These NAEP findings suggest that teachers have been responsive to calls for less reliance on traditional assessment methods in their classrooms and, in fact, have found certain alternative or performance-based measures to be worthwhile components of their reading

In addition to receiving information about classroom assessment practices from teachers, information about the use of written responses to reading was collected from students. Fourth- and eighth-graders were asked how often their teachers ask them to provide long written answers to questions on tests or assignments that involve reading. Table 1 also presents their responses to this question. Similar to the reports of their teachers, 79 percent of fourth-graders and 81 percent of eighth-graders said that they write long answers to questions on tests or assignments that involve reading on at least a monthly basis. It should be noted that the responses provided by teachers were an indication of how assessment is conducted in all of the classes in which they teach reading. The responses of students reflected their individual experiences.

Relationships Between Assessment Methods and Students' NAEP Reading Scores

When examining data collected in NAEP assessments, it is important to recognize that the relationship between reading scores and instructional or classroom assessment practices should be interpreted as a correlational relationship rather than a causal one. That is, without further investigation, it is impossible to determine whether certain classroom practices have resulted in higher or lower reading performance, or if students with lower or higher reading performance are more likely to be taught and assessed in a particular manner. Therefore, interpretations of the data should be considered in light of existing research. For example, while some research has suggested that focusing on writing and performance activities may increase students' reading achievement (Farr, et al, 1990), it may also be that teachers are more likely to use these more challenging and complex assessment activities with higher-ability students. The results presented in table 2 provide some interesting findings regarding the relationship between assessment practices and students' reading achievement.

Written Responses to Reading. Both teachers' and students' reports about the use of written responses to reading were related to students' reading scores. However, this relationship was somewhat different at each grade. As displayed in table 2, fourth-graders whose teachers reported weekly or monthly use of written paragraphs to assess reading had higher scale scores than fourth- graders whose teachers reported never or hardly ever using this mode of assessment.[2] At the eighth grade, although the relationship between reading scores and the use of written paragraphs demonstrated a similar pattern, the results were not statistically significant. However, analysis of students' reports did reveal a relationship between written responses and reading scores at both grades. Students in either grade who reported being asked to write long answers to questions on tests or assignments at any level of frequency had higher reading scores than students who reported being asked to do so never or hardly ever.

Short Answer Tests. The way in which short answer tests are constructed and the level of understanding required may vary widely. For example, what may be considered a short answer question could range from a simple fill-in-the-blank question to a question that requires a written response of a sentence or two. Consequently, the relationship between the use of this type of assessment method and students' reading scores may be less clear. The only relationship between teachers' reports of using short answer tests and students' reading scores was at the fourth grade: students whose teachers reported weekly use of this assessment method had lower reading scores than students whose teachers reported monthly use.

Table 2— Average NAEP reading scores by frequency of various assessment methods, grades 4 and 8, 1994 NAEP reading assessment

Assessment Methods	Grade 4				Grade 8			
	Once or Twice a Week	Once or Twice a Month	Once or Twice a Year	Never or Hardly Ever	Once or Twice a Week	Once or Twice a Month	Once or Twice a Year	Never or Hardly Ever
Teachers' Reports								
Written paragraphs	216	216	216	203	262	261	258	254
Short answer tests	210	217	220	216	258	261	266	262
Multiple-choice tests	213	214	218	216	256	260	265	264
Projects-Presentations	209	217	216	210	258	264	260	250
Reading Portfolios	211	213	218	217	255	257	267	262
Students' Reports								
Long written answers on reading tests or assignments	217	221	209	198	263	263	257	235

SOURCE: U.S. Department of Education, National Assessment of Educational Progress (NAEP), 1994 Reading Assessment.

Multiple-Choice Tests. Teachers' reports about the frequency of testing with multiple-choice questions demonstrated a relationship with students' reading scores at the eighth grade. Students whose teachers reported using multiple-choice tests on a weekly basis had lower reading scores than students whose teachers reported yearly or less than yearly use of this question type. Although a similar relationship between multiple-choice testing and students' reading scores seemed apparent at the fourth grade, it was not statistically significant.

Projects and Presentations. The nature of projects and presentations used by teachers to assess reading may vary widely. Oral book reports, art activities, and collaborative research projects are some examples of the types of exercises teachers may use to assess their students' progress in reading. Here again, the relationship between such assessment practices and students' reading scores may vary depending on the exact nature of the project or presentation. At the eighth grade, there was some indication that using projects or presentations for assessment purposes was associated with higher reading scores: students whose teachers reported using such methods monthly or yearly had higher scores than students whose teachers reported never or hardly ever using them.

Reading Portfolios. The use of portfolios to assess reading progress has become more prominent in the past few years. However, approximately one half of fourth- and eighth-graders in 1994 had teachers who reported never or hardly ever using this assessment method. A statistically significant relationship between the use of reading portfolios and students' reading scores was observed at the eighth grade: students whose teachers reported weekly use of this assessment method had lower reading scores than students whose teachers reported using it yearly or less than yearly. Also, the reading scores of students whose teachers reported monthly use of portfolios was lower than scores of students whose teachers reported yearly use. At the fourth grade, no statistically significant relationship was observed. One question that may be asked regarding these findings is whether or not some teachers use portfolio assessment procedures more intensely with students who have demonstrated lower reading achievement. As described earlier, NAEP data cannot be used to make causal interpretations between assessment practices and students' reading abilities. These findings should be considered in light of the fact that teachers may use portfolios in their classrooms for a variety of purposes and with students at various stages of reading development.

Discussion

Overall, NAEP data revealed an array of classroom-based assessment techniques being used by reading teachers of fourth- and eighth-grade students. Furthermore, there appeared to be an emphasis on methods that require students to demonstrate reading abilities through written responses. The data collected by NAEP in 1994 suggest that teachers were not simply relying on traditional, multiple-choice tests to determine the progress of their students in reading. Rather, many teachers reported using classroom assessment procedures that could be considered instructionally-embedded activities—written paragraphs, projects or presentations, and reading portfolios.

Teacher-reported and student-reported information about writing in response to reading points to a positive relationship between this activity and reading achievement. While these findings may be supportive of research indicating that integrating reading and writing promotes reading achievement, another perspective on these data could be that lower-ability students were not receiving the same challenging, integrative tasks as a part of their instruction and assessment. Such a phenomenon has been documented in some research indicating the potential for more advanced students to be continually exposed to stimulating, innovative activities, while slower developing readers are relegated to the less challenging and more simplistic exercises (Stanovich, 1986).

Knowing that teachers in the United States are implementing the range of assessment tools indicated by the NAEP data prompts several questions about the usefulness and consequences of such practices. Educators and researchers will undoubtedly want to gain more information about how these assessment techniques affect students' motivations and learning outcomes. Questions remain to be answered about the time and resources required for classrooms to engage in less traditional measurement procedures on an ongoing basis. Finally, it is critical to consider what type and how much support teachers need to devise and implement less traditional assessments, particularly in addressing the individual differences of students in their classrooms.

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Notes

[1]All differences reported in this publication are significant at the .05 level with appropriate adjustments for multiple comparisons.

[2]The difference betwen scores associated with "once or twice a year" and "never or hardly ever" responses was not statistically significant.

NAEPfacts briefly summarize findings from the National Assessment of Educational Progress (NAEP). The series is a product of the National Center for Education Statistics, Gary W. Phillips, Associate Commissioner for Education Assessment. This issue of *NAEPfacts* was written by Jay Campbell of the Educational Testing Service. To order other NAEP publications, call Bob Clemons at 202–219–1690, or email bob_clemons@ed.gov.

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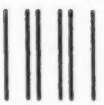

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